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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,198	04/03/2001	Sridhar Kanamaluru	SAR 13980	2716

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EXAMINER	
DEAN, RAYMOND S	
ART UNIT	**PAPER NUMBER**
2684	5

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/825,198	KANAMALURU ET AL.	
	Examiner	Art Unit	
	Raymond S Dean	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on 2/24/04

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1 - 20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1 - 20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 – 4, 8 – 9, and 12 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimomura et al. (US 6,526,580 B2) in view of Nakatsuyama (US 6,658,231 B2).

Regarding Claim 1, Shimomura teaches a method of distributing information to a user comprising: a plurality of heterogeneous broadcast networks (Column 4 lines 15 – 22), receiving the broadcast information in a user device from at least one of the plurality of heterogeneous broadcast networks (Column 4 lines 23 – 35), and filtering, within the user device, said broadcast information to generate user specific information (Column 4 lines 23 – 35, the receiver uses preprogrammed interest parameters to filter out the data that the user is not interested in).

Shimomura does not teach storing collected information in an information database and transmitting some of the collected information as broadcast information.

Nakatsuyama teaches storing collected information in an information database and transmitting some of the collected information as broadcast information (Figure 1, Column 3 lines 62 – 67, Column 4 lines 1 – 45, Column 5 lines 64 – 67, Column 6 lines 1 – 11, the information to be transmitted is pre-selected based on the user's preferences thus only the information that is of interest to the user will be broadcast).

Shimomura and Nakatsuyama both teach a wireless broadcast system that provides digital content tailored to a user's personal preferences thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the use the above method taught in Nakatsuyama in the wireless broadcast system of Shimomura for the purpose of allowing each end user to receive content that is tailored to the individual preference of each said end user.

Regarding Claim 2, Shimomura in view of Nakatsuyama teaches all of the claimed limitations recited in Claim 1. Nakatsuyama further teaches transmitting some

of the collected information in accordance with predetermined criteria to generate a subset of the collected information (Figure 1, Column 3 lines 62 – 67, Column 4 lines 1 – 45, Column 5 lines 64 – 67, Column 6 lines 1 – 11, the information to be transmitted is pre-selected based on the user's preferences thus only the information that is of interest to the user, which is a subset of all of the information, will be broadcast).

Regarding Claim 3, Nakatsuyama teaches all of the claimed limitations recited in Claim 2. Nakatsuyama further teaches collecting the collected information from an information network that comprises one or more networks selected from a group consisting of a voice network, a video network, and a data network (Column 4 lines 24 – 30, the financial news, sports scores, and information available through the internet is digitized data that comes from a data network).

Regarding Claim 4, Shimomura in view of Nakatsuyama teaches all of the claimed limitations recited in Claim 1. Shimomura further teaches inserting said broadcast information into a digital television signal and broadcasting said digital television signal (Column 4 lines 15 – 20).

Regarding Claim 8, Shimomura in view of Nakatsuyama teaches all of the claimed limitations recited in Claim 1. Shimomura further teaches determining an information preference of the user and generating said user-specific information based on said information preference (Column 4 lines 23 – 35, the receiver uses preprogrammed interest parameters to filter out the data that the user is not interested in).

Regarding Claim 9, Shimomura teaches all of the claimed limitations recited in Claim 8. Shimomura further teaches wherein said information preference is pre-defined by the user (Column 4 lines 31 – 35).

Regarding Claim 12, Shimomura teaches a system for distributing information to a user comprising: a plurality of heterogeneous broadcast networks (Column 4 lines 15 – 22), a user device for receiving the broadcast information in a user device from at least one of the plurality of heterogeneous broadcast networks (Column 4 lines 23 – 35), the user device having a user filter for filtering the broadcast information and generating user specific information (Column 4 lines 23 – 35, the receiver uses preprogrammed interest parameters to filter out the data that the user is not interested in).

Shimomura does not teach a database for storing information collected from an information network as collected information and transmitting at least some of the collected information as broadcast information.

Nakatsuyama teaches a database for storing information collected from an information network as collected information and transmitting at least some of the collected information as broadcast information (Figure 1, Column 3 lines 62 – 67, Column 4 lines 1 – 45, Column 5 lines 64 – 67, Column 6 lines 1 – 11, the information to be transmitted is pre-selected based on the user's preferences thus only the information that is of interest to the user will be broadcast).

Regarding Claim 13, Shimomura in view of Nakatsuyama teaches all of the claimed limitations recited in Claim 12. Nakatsuyama further teaches an information

provider filter for generating a subset of the collected information that is in accordance with a predetermined or heuristically learned criteria for transmission as the broadcast information (Figure 1, Column 3 lines 62 – 67, Column 4 lines 1 – 45, Column 5 lines 64 – 67, Column 6 lines 1 – 11, the information to be transmitted is pre-selected based on the user's preferences thus only the information that is of interest to the user, which is a subset of all of the information, will be broadcast).

Regarding Claim 14, Nakatsuyama teaches all of the claimed limitations recited in Claim 13. Nakatsuyama further teaches an information network that comprises one or more networks selected from a group consisting of a voice network, a video network, and a data network (Column 4 lines 24 – 30, the financial news, sports scores, and information available through the internet is digitized data that comes from a data network).

Regarding Claim 15, Shimomura in view of Nakatsuyama teaches all of the claimed limitations recited in Claim 12. Shimomura further teaches a broadcast digital television network (Column 4 lines 15 – 20).

3. Claims 5 – 6, 10 – 11, and 16 - 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimomura et al. (US 6,526,580 B2) in view of Nakatsuyama (US 6,658,231 B2) and in further view of Dowling et al. (US 6,522,875 B1).

Regarding Claim 5, Shimomura in view of Nakatsuyama teaches all of the claimed limitations recited in Claim 1. Shimomura in view of Nakatsuyama does not

teach determining a location of the user and filtering said broadcast information based on said location.

Dowling teaches determining a location of the user and filtering said broadcast information based on said location (Column 4 lines 52 – 62).

Shimomura in view of Nakatsuyama (Column 6 lines 47 – 51) and Dowling teach a wireless broadcast system that broadcasts data packets of content to a mobile subscriber and filtering said content based on said subscribers' personal preferences thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the above method taught in Dowling in the wireless broadcast system of Shimomura in view of Nakatsuyama for the purpose of enabling a mobile subscriber to have access to content tailored to the location and personal preference of said mobile subscriber.

Regarding Claim 6, Shimomura in view of Nakatsuyama and in further view of Dowling teaches all of the claimed limitations recited in Claim 5. Dowling further teaches said location of the user is determined by a global positioning system (GPS) (Column 4 lines 52 – 62).

Regarding Claim 10, Shimomura teaches all of the claimed limitations recited in Claim 8. Shimomura in view of Nakatsuyama does not teach wherein said information preference is determined heuristically.

Dowling teaches an information preference that is determined heuristically (Column 9 lines 60 – 65, Column 10 lines 14 – 39, The user can input keywords or a URL through an input/output module, that is a part of the mobile unit, The mobile unit

learns the user's preferences based on the previous information that the user entered into the input/output module and sets up a filter that is based on these learned preferences).

Shimomura in view of Nakatsuyama (Column 6 lines 47 – 51) and Dowling teach a wireless broadcast system that broadcasts data packets of content to a mobile subscriber and filtering said content based on said subscribers' personal preferences thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the above method taught in Dowling in the wireless broadcast system of Shimomura in view of Nakatsuyama for the purpose of enabling a mobile subscriber to have access to content tailored to the location and personal preference of said mobile subscriber.

Regarding Claim 11, Shimomura in view of Nakatsuyama and in further view of Dowling teaches all of the claimed limitations recited in Claim 5. Dowling further teaches determining a viewing direction of the user device, wherein said user-specific information corresponds to the viewing direction and location of the user device (Column 4 lines 52 – 62, Column 5 lines 3 – 7, Column 5 lines 15 – 18, in order for the best route to be determined the location of the mobile unit and direction in which mobile unit faces must be determined, therefore an inherent determination of the pointing direction is manifested).

Regarding Claim 16, Shimomura in view of Nakatsuyama teaches all of the claimed limitations recited in Claim 12. Shimomura in view of Nakatsuyama does not teach a personal preference filter for filtering said broadcast information in accordance

with a user's personal preferences and a user location filter for filtering said broadcast information in accordance with a user's location.

Dowling teaches a personal preference filter for filtering said broadcast information in accordance with a user's personal preferences and a user location filter for filtering said broadcast information in accordance with a user's location (Column 4 lines 12 – 18, Column 4 lines 52 – 62, the information preference of the user is determined based on a pre defined criterion and the corresponding information is transmitted to said user, in this case local restaurant information).

Shimomura in view of Nakatsuyama (Column 6 lines 47 – 51) and Dowling teach a wireless broadcast system that broadcasts data packets of content to a mobile subscriber and filtering said content based on said subscribers' personal preferences thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the above method taught in Dowling in the wireless broadcast system of Shimomura in view of Nakatsuyama for the purpose of enabling a mobile subscriber to have access to content tailored to the location and personal preference of said mobile subscriber.

Regarding Claim 17, Shimomura in view of Nakatsuyama and in further view of Dowling teaches all of the claimed limitations recited in Claim 16. Dowling further teaches wherein said user's personal preferences comprise pre-determined user preferences (Column 4 lines 12 - 18).

Regarding Claim 18, Shimomura in view of Nakatsuyama and in further view of Dowling teaches all of the claimed limitations recited in Claim 16. Dowling further

teaches wherein said user's personal preferences comprise heuristically determined user preferences (Column 9 lines 60 – 65, Column 10 lines 14 – 39, the user can input keywords or a URL through an input/output module, that is a part of the mobile unit, the mobile unit learns the user's preferences based on the previous information that the user entered into the input/output module and sets up a filter that is based on these learned preferences).

Regarding Claim 19, Shimomura in view of Nakatsuyama and in further view of Dowling teaches all of the claimed limitations recited in Claim 16. Dowling further teaches wherein said user's location is determined by a global positioning system (GPS) (Column 4 lines 52 – 62).

4. Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimomura et al. (US 6,526,580 B2) in view of Nakatsuyama (US 6,658,231 B2) in further view of Dowling et al. (US 6,522,875 B1) and in further view of Moon (US 6,405,047 B1).

Regarding Claim 7, Shimomura in view of Nakatsuyama and in further view of Dowling teaches all of the claimed limitations recited in Claim 5. Shimomura in view of Nakatsuyama and in further view of Dowling does not teach a location of the user that is determined by a network of terrestrially based wireless stations.

Moon teaches a location of the user that is determined by a network of terrestrially based wireless stations (Figure 4, Column 4 lines 51 – 67, Column 5 lines 1 – 6).

Shimomura in view of Nakatsuyama and in further view of Dowling and Moon teach a mobile device that determines it's location thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a design preference and use the above method taught in Moon in the mobile device of Shimomura in view of Nakatsuyama and in further view of Dowling as an alternative means for determining the location of said mobile device.

Regarding Claim 20, Shimomura in view of Nakatsuyama and in further view of Dowling teaches all of the claimed limitations recited in Claim 16. Shimomura in view of Nakatsuyama and in further view of Dowling does not teach said user's location being determined by a network of terrestrially based wireless stations.

Moon teaches said user's location being determined by a network of terrestrially based wireless stations (Figure 4, Column 4 lines 51 – 67, Column 5 lines 1 – 6).

Shimomura in view of Nakatsuyama and in further view of Dowling and Moon teach a mobile device that determines it's location thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a design preference and use the above method taught in Moon in the mobile device of Shimomura in view of Nakatsuyama and in further view of Dowling as an alternative means for determining the location of said mobile device.

Response to Arguments

5. Examiner acknowledges receipt of the three sheets (Figures 1 – 3) with reference sign 314 included in Figure 3C thus the objection to the drawings is withdrawn.

Examiner acknowledges correction to the misspelling of the word "could" in paragraph 0021 thus the objection to the specification is withdrawn.

Regarding Claims 1 – 3, 5 – 6, 8 – 14, and 16 – 19, Examiner agrees with applicant on the matter that Burfeind and Dowling does not teach broadcasting information over a plurality of heterogeneous networks thus there is no motivation to combine Burfeind and Dowling. There is motivation, however, to combine Dowling with a reference that teaches a broadcast network that broadcasts digital data, as taught by both Shimomura and Nakatusyama, because Dowling teaches a network that broadcasts digital data to a mobile receiver.

Regarding Claims 4 and 15, Examiner agrees with applicant on the matter that Burfeind, Dowling, and Matsushima do not teach broadcasting information over a plurality of heterogeneous networks thus there is no motivation to combine Burfeind, Dowling, and Matsushima. There is motivation, however, to combine Dowling with a reference that teaches a broadcast network that broadcasts digital data, as taught by both Shimomura and Nakatusyama, because Dowling teaches a network that broadcasts digital data to a mobile receiver.

Regarding Claims 7 and 20, Examiner respectfully disagrees with applicant on the matter of the combination of Dowling and Petty. Petty teaches the use of terrestrially based wireless stations to determine the location of the wireless receiver

because triangulation can be used. The triangulation will not occur without the terrestrially based stations because the time of arrival of the signal transmitted between the wireless receiver and the terrestrially based stations, which depends on the propagation delay of said signal, is needed. Petty and Dowling both teach a method of determining the location of a mobile unit. There are two methods, which are well known by those of ordinary skill in the art, for locating a mobile unit. These two methods are GPS satellites and triangulation using base stations thus it would have been obvious to one of ordinary skill in the art to make a design preference and use the base stations of Dowling (Figure 1, the base station is providing a link to the mobile unit via antenna (110)) as an alternative means for determining the location of said mobile unit.

Conclusion

6. Any inquiry concerning this communication should be directed to Raymond S. Dean at telephone number (703) 305-8998.

If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand – delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377

NAY MAUNG
SUPERVISORY PATENT EXAMINER